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175 CANAL STREET  
MANCHESTER, NH 03101-2335

EXAMINER

STAICOVICI, STEFAN

ART UNIT

PAPER NUMBER

1732

DATE MAILED: 05/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/780,919

Applicant(s)

KAPTEYN ET AL.

Examiner

Stefan Staicovici

Art Unit

1732

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 9-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 12 and 13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-13 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Election/Restrictions*

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

Species A: inductive thickness measurement system for controlling a scoring process.

Species B: inductive thickness measurement system for controlling a molding process.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1-2 and 5-7 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the

examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

2. During a telephone conversation with Mr. Steve Grossman on April 22, 2003 a provisional election was made with traverse to prosecute the invention of Species A, claims 1-8 and 12-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-11 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

#### *Specification*

✓ 4. The disclosure is objected to because of the following informalities:

- on page 4, line 5, after "In", --an-- should be inserted;
- ✓ - on page 4, line 16, after "yet", --a-- should be inserted.

Appropriate correction is required.

*Claim Rejections - 35 USC § 102*

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by GB 2 035 566.

GB 2 035 566 teaches the claimed process of measuring the thickness of a non-metallic panel including, providing a non-metallic panel (1), positioning a metallic ball (2) opposite an inductive sensor (7) at a first position in contact with said non-metallic panel (1) and moving said metallic ball and said inductive sensor along said non-metallic panel to obtain measurements of the thickness of said panel (see page 1, lines 13-24 and 74-94 and, page 2, lines 79-90). It is submitted that by moving said metallic ball and said inductive sensor along said non-metallic panel a thickness profile is obtained. Further, it should be noted that recitation of the intended use of the claimed process must result in a structural difference between the claimed process and the prior art in order to patentably distinguish the claimed invention from the prior art. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art.

Regarding claim 2, GB 2 035 566 teaches a Wheatstone bridge (linear analog sensor) (see Figure 2).

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-8 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer *et al.* (US Patent No. 6,294,124 B1) in view of GB 2 035 566 and in further view of GB 2 2217 835.

Bauer *et al.* ('124) teach the basic claimed process of measuring the thickness of an automotive trim panel including, providing a trim panel, scoring said trim panel and measuring the thickness of said trim panel while scoring in order to determine the thickness of the remaining material (see column 6, line 55 through column 7, line 23).

Regarding claims 1 and 12, although Bauer *et al.* ('124) teach a thickness measuring system, Bauer *et al.* ('124) do not teach an inductive thickness measurement system. GB 2 035 566 teaches a process of measuring the thickness of a non-metallic panel including, providing a non-metallic panel (1), positioning a metallic ball (2) opposite an inductive sensor (7) at a first position in contact with said non-metallic panel (1) and moving said metallic ball and said inductive sensor along said non-metallic panel to obtain measurements of the thickness of said panel (see page 1, lines 13-24 and 74-94 and, page 2, lines 79-90). It is submitted that by moving said metallic ball and said inductive sensor along said non-metallic panel a thickness profile is obtained. GB 2 2217 835 specifically teaches that laser, ultrasonic and inductive systems are

equivalent alternatives that are used in measuring the thickness of a non-metallic panel. Therefore, it would have been obvious for one of ordinary skill in the art to have provided an inductive thickness measurement system as taught by GB 2 035 566 as an equivalent alternative to the laser thickness measurement system in the process of Bauer *et al.* ('124) because, GB 2 2217 835 specifically teaches that laser, ultrasonic and inductive systems are equivalent alternatives that are used in measuring the thickness of a non-metallic panel.

Regarding claim 2, GB 2 035 566 teaches a Wheatstone bridge (linear analog sensor) (see Figure 2). GB 2 2217 835 teaches the use of ultrasonic, laser and inductive thickness measurement systems as equivalent alternatives. Therefore, it would have been obvious for one of ordinary skill in the art to have provided a Wheatstone bridge (linear analog sensor) inductive thickness measurement system as taught by GB 2 035 566 as an equivalent alternative to the laser thickness measurement system in the process of Bauer *et al.* ('124) because, GB 2 2217 835 specifically teaches that laser, ultrasonic and inductive systems are equivalent alternatives that are used in measuring the thickness of a non-metallic panel.

In regard to claims 3-5 and 12, Bauer *et al.* ('124) teach a second robot arm (36A) that manipulates a gauging laser beam generator (48) that directs and reflects a low power laser beam (52) upon an automotive panel cover (42), said reflected laser beam being detected and analyzed by a laser gauging circuit (50). Further, Bauer *et al.* ('124) teach developing a signal from the laser gauging circuit (50) indicating the precise location of the cover surface at a point just ahead of the cutting laser (14B) such that the central computer control (38) determines the position of the cutting laser beam generator (34) (laser scoring) to be shifted by the robot arm (36)

correspondingly (or to adjust the output beam) so as to maintain a groove depth which will produce a constant thickness of remaining material. Therefore, it would have been obvious for one of ordinary skill in the art to have provided an inductive thickness measurement system as taught by GB 2 035 566 as an equivalent alternative to the laser thickness measurement system in the process of Bauer *et al.* ('124) because, GB 2 2217 835 specifically teaches that laser, ultrasonic and inductive systems are equivalent alternatives that are used in measuring the thickness of a non-metallic panel.

Specifically regarding claim 6, GB 2 035 566 teaches mounting the inductive sensor on a spring (8) (flexible mechanism) (see page 1, lines 80-85).

Regarding claims 7-8 and 13, Bauer *et al.* ('124) teach an automotive panel cover (42) that is scored in order to release an air bag.

9. Claims 1-2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 2 035 566 in view of Bauer *et al.* (US Patent No. 6,294,124 B1).

GB 2 035 566 teaches the claimed process of measuring the thickness of a non-metallic panel including, providing a non-metallic panel (1), positioning a metallic ball (2) opposite an inductive sensor (7) at a first position in contact with said non-metallic panel (1) and moving said metallic ball and said inductive sensor along said non-metallic panel to obtain measurements of the thickness of said panel (see page 1, lines 13-24 and 74-94 and, page 2, lines 79-90). It is submitted that by moving said metallic ball and said inductive sensor along said non-metallic panel a thickness profile is obtained.



Regarding claims 1 and 7, although GB 2 035 566 teaches a non-metallic (plastic) panel, GB 2 035 566 does not specifically teach an automotive trim/instrument panel. Bauer *et al.* ('124) teach a process for scoring an automotive trim/instrument panel made of plastic material (see column 2, lines 48-50) using a laser and measuring the thickness of said trim panel. Since GB 2 035 566 teaches a non-metallic (plastic) panel, it would have been obvious for one of ordinary skill in the art to have provided an automotive trim/instrument panel as taught by Bauer *et al.* ('124) as the non-metallic panel in the process of GB 2 035 566 because GB 2 035 566 requires a non-metallic (plastic) panel and Bauer *et al.* ('124) teaches that an automotive trim/instrument panel is a non-metallic panel, hence both references teaching a non-metallic panel.

In regard to claim 2, GB 2 035 566 teaches a Wheatstone bridge (linear analog sensor) (see Figure 2).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Staicovici, Ph.D. whose telephone number is (703) 305-0396. The examiner can normally be reached on Monday-Friday 8:00 AM to 5:30 PM and alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard D. Crispino, can be reached at (703) 308-3853. The fax phone number for this Group is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Stefan Staicovici, PhD

 5/18/03

Primary Examiner

AU 1732

May 18, 2003